



## MERCMASTER™ LED LOW PROFILE LUMINAIRES FOR HAZARDOUS LOCATIONS

### SUITABLE LOCATIONS AND APPLICATIONS

- Enclosed and gasketed fixtures suitable for use in:
  - A wide range of industrial, chemical processing and other areas where flammable gases, vapors, and dusts are present
  - Marine and wet locations
  - Areas of low clearance, low ceiling heights or where fixture weights must be minimized
- Typical applications include:
  - Walkways/catwalks
  - Stairwells
  - Grain elevators
  - Tunnels
  - Pipe racks
  - Offshore rigs
  - Vessel lighting
  - Cooling towers
  - Processing areas

### FEATURES

- Choice of color temperature (CCT): 5000K cool white, 4000K neutral white or 3000K warm white.
- Seven standard mounting hood designs allow for mounting in any location. Uses same mounting hoods as Mercmaster™ III, Mercmaster™ Premium LED and Mercmaster™ LED Generation 3.
- Customize to the application requirements with four different field replaceable globe options: clear and diffused polycarbonate, clear glass, or prismatic glass refractor.
- Three light output levels for retrofit of HID fixtures up to 175 W.

Nominal Lumens ①	HID Equivalent	Model Number
3300	70–100W	MLLED2CG5BU
4400	100–150W	MLLED3CG5BU
5500	150–175W	MLLED4CG5BU

① Nominal lumen value for 5000K, clear glass globe. Type V. Detailed lumen information is provided in tables in catalog pages.

② BH voltage available for cCSAus rating only.

③ Factory installed. (For retrofit applications, fusing must be removed from the mounting hood and ordered in the luminaire).

④ Available for 120-277 VAC models only. NEC, Class I, Division 2 photocells for classified use are available, see PCD2 Series.

\* Refer to ambient range table contained in the IECEx certificate of conformity or the T-code ratings table in the catalog pages.

- Retrofit adapters for Crouse Hinds™ hood available. See Mercmaster™ CH Adapters.
- Retrofit adapters for Mercmaster™ II hoods available. See Mercmaster™ II Adapters.
- Retrofit adapter for Killark™ hoods available. See Killark™ Adapter.
- New Watertight Pendant Hood available to address water ingress into luminaire via conduit.
- Hinge has high lip for added safety during installation and servicing. Hinge and bolt construction assures 360° compression at all points on fixture housing gasket for positive sealing. Swing away design of captive bolt and nut simplifies servicing.
- Standard 6 kV surge protection.
- Ambient Temperature:
  - BU: -40 °C to +65 °C (-40 °F to +149 °F)
  - BH: -40 °C up to +65 °C (-40 °F up to +149 °F)
- Standard screw-type terminal block can accept UL/CSA 26-10 AWG wire.
- Heavy duty, high temperature silicone rubber gaskets.
- Standard NPT threads.
- LED L70 rated at 109,000 Hours with a calculated fixture life of 200,000 hours @ +25 °C (+77 °C).
- Field replaceable globes and LED driver.
- Rugged housing with superior thermal design translates to long luminaire life.
- Photobiological Safety, per IEC standards

### OPTIONS

- Glass globe and glass refractor guard available, purchase separately.
- All Mercmasters have provision for fusing; add suffix -F at the end of the catalog number.

- Photocontrols are available with all except ceiling and pendant cone mounting hoods ③. Add suffix -1 for 120V, -2 for 208V, -3 for 240V, -4 for 277V. ④

### STANDARD MATERIALS

- Mounting hoods and bodies: cast copperfree (4/10 of 1% max.) aluminum
- All hardware and catch assemblies: stainless steel
- Globe: polycarbonate or glass
- Refractor: heat-resistant prismatic glass
- Glass globe guard: stainless steel wire
- Glass refractor guard: die cast aluminum
- Refractor: fiberglass reinforced white polyester

### STANDARD FINISHES

- Mounting hoods, bodies and glass refractor guard: gray epoxy powder coat finish, electrostatically applied for complete uniform protection

### RELATED PRODUCTS

- Mercmaster™ Retrofit Adapters
- Mercmaster™ III Products
- Mercmaster™ Generation 3 Products

### ACCESSORIES

- Safety Cable - LEDSC
- Refractor Guard - KRG2
- Globe Guard - MGU1
- Angled Reflector - CMR4AN
- Visor - MMVISOR

APPLETON™

  
EMERSON™

CONSIDER IT SOLVED™

# MERCMASTER™ LED LOW PROFILE LUMINAIRES FOR HAZARDOUS LOCATIONS

## NEC/CEC RATINGS

- Class I, Division 2, Group A, B, C, D
- Class I, Zone 2, Group IIC
- Class II, Division 1, Group E, F, G
- Zone 20, Group IIIC
- Zone 21, AEx tb IIIC, EX tb IIIC
- Class III
- Suitable for use in Wet Locations
- Marine Outside Type (Salt Water) For USA ONLY
- Type 3R, 4 and 4X
- IP66/IP67
- Simultaneous Exposure
- American Bureau of Shipping (ABS) Certified
- International Dark Sky (IDA) Approved<sup>Ⓞ</sup>

## ATEX RATINGS:

- Zone 2 and 21/22
- II 2D
- II 3GD
- IP66
- IK08

## IECEX RATINGS

- Zone 2 and 21/22
- Ex ec IIC T\* Gc
- Ex op is tb IIIC T\*\*C Db
- Ex tc IIIC T\*\*C Dc
- IP66
- IK08

## NEC/CEC CERTIFICATIONS AND COMPLIANCES

- UL Standards: UL1598, UL1598A, UL8750, UL50E, UL 844
- CSA Standards: C22.2 No. 0-10; C22.2 No. 94.2-15; C22.2 No. 137 -M1981; C22.2 No. 250.0 - 08; C22.2 No. 250.13 - 14; C22.2 No. 60598-1:16;
- NEMA, ANSI/IEC Standard: 60529
- cCSAus Listed: Master Contract 164460, Certificate Number 70134063

## ATEX/IECEX CERTIFICATIONS AND COMPLIANCES

- Certification Type: Mercmaster Low Profile
  - Gas: Zones 2
    - Conforming to ATEX 2014/34/EU: II 3 G
    - Type of Protection: Ex ec IIC T\* Gc
    - Temperature Class: T5 to T4
  - Dust: Zones 21 and 22
    - Conforming to ATEX 2014/34/EU: II 2 D
    - Type of Protection: Ex op is tb IIIC T\*\*C Db
    - Ex tc IIIC T\*\*C Dc
    - Surface Temperature: +66 °C to +88 °C (+151 °F to +190 °F)
- Ambient Temperature: -40 °C up to +65 °C (-40 °F up to 149 °F)
- ATEX Certificate: Sira 17ATEX9365X
- IECEx Certificate: IECEx SIR 17.0085X
- Index of Protection according EN/IEC 60529: IP66
- Impact Resistance (shock): IK08
- Photobiological Safety, IEC 62778 and IEC 62471, RG0 on all models and globes

\* Refer to ambient range table contained in the IECEX certificate of conformity or the T-code ratings table in the catalog pages

<p><b>MLLED</b></p> <p>Series:</p> <p>MLLED: NEC/CEC and IECEx/ATEX Certified Mercmaster™ LED Low Profile Series</p>	<p><b>A</b></p> <p>Mounting:</p> <p>A - Pendant B - Watertight Pendant hood* C - Ceiling <sup>Ⓞ</sup> D - Pendant Cone Hood <sup>Ⓞ</sup> R - 90° Stanchion S - 25° Stanchion T - Trunnion* W - Wall K - Killark™ Adapter Universal* X - Crouse-Hinds™ Adapter, Centered* Y - Crouse-Hinds™ Adapter, Off-set* U - Mercmaster™ II Adapter, Ceiling or Pendant* V - Mercmaster™ II Adapter, Stanchion or Wall* Blank - Ballast housing only (no mounting hood)</p>	<p><b>4</b></p> <p>Lumen Output <sup>Ⓞ</sup>:</p> <p>2 - 3K Lumens 3 - 4K Lumens 4 - 5K Lumens</p>	<p><b>2</b></p> <p>Hub Size:</p> <p>2 - 3/4" NPT 3 - 1" NPT 4 - 1-1/4" NPT stanchion 5 - 1-1/2" NPT stanchion 6 - M20 Metric hub Blank - No Hub Required - Adapters or No hood</p>	<p><b>C</b></p> <p>Color Temperature:</p> <p>C - Cool, 5000K CCT N - Neutral, 4000K CCT W - Warm, 3000K CCT</p>	<p><b>J5</b></p> <p>Globe Type:</p> <p>P5 - NEMA Type V Clear Polycarbonate Globe D5 - NEMA Type V Diffused Polycarbonate Globe G5 - NEMA Type V Glass Globe <sup>Ⓞ</sup> J5 - NEMA Type V Glass Refractor *<sup>Ⓞ</sup></p>	<p><b>BU</b></p> <p>Voltage <sup>Ⓞ</sup>:</p> <p>BU - 120-277 VAC, 50/60Hz or 125-300 VDC BH - 347-480 VAC, 50/60Hz*</p>	<p><b>E</b></p> <p>Fusing:</p> <p>F - Fusing <sup>Ⓞ</sup> Blank - No fusing</p>	<p><b>1</b></p> <p>Photocontrol:</p> <p>1 - Photocontrol 120V <sup>Ⓞ</sup> 2 - Photocontrol 208V <sup>Ⓞ</sup> 3 - Photocontrol 240V <sup>Ⓞ</sup> 4 - Photocontrol 277V <sup>Ⓞ</sup> Blank - No photocontrol</p>
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\* Certified for cCSAus only.

## Example part number: MLLEDA2CJ5BU1

This is a Mercmaster™ LED Low Profile Series luminaire with a pendant mount, 5000 lumen output, 3/4" NPT hub size, 5000K CCT color temperature, with a NEMA Type V Glass Refractor globe. The voltage is 120-277 VAC or 125-300 VDC, 50/60Hz. It has a 120V photocontrol.

	MLLED2			MLLED3			MLLED4		
	BU			BU			BU		
<b>Voltage Range</b>	BU: 120-277 VAC, 125-300 VDC, 50/60Hz						BH: 347-480 VAC, 50/60Hz		
<b>Input Power (@ 120V)</b>	28W			38W			48W		
<b>Color Temperature (CCT)</b>	5000K	4000K	3000K	5000K	4000K	3000K	5000K	4000K	3000K
<b>- P5 Lumens</b>	3200	3000	3000	4200	4000	3900	5300	5000	4900
<b>- D5 Lumens</b>	3100	2900	2900	4100	3900	3800	5150	4900	4800
<b>- G5 Lumens</b>	3300	3100	3100	4400	4200	4100	5500	5200	5100
<b>- J5 Lumens</b>	3000	2800	2800	4000	3800	3700	4900	4650	4600
<b>Line Current</b>	0.28 @ 120V 0.13 @ 277V	0.10 @ 347V 0.06 @ 480V		0.38 @ 120V 0.16 @ 277V	0.13 @ 347V 0.08 @ 480V		0.48 @ 120V 0.20 @ 277V	0.16 @ 347V 0.10 @ 480V	
<b>NEC/CEC T-Code (@ 65 °C simultaneous use)</b>	T4A			T4A			T4		
<b>ATEX/IECEX Zone 2 T-Code</b>	MLLED2 = T4 @ +65 °C (+149 °F)			MLLED3 = T4 @ +65 °C (+149 °F)			MLLED4 = T4 @ +65 °C (+149 °F)		
<b>Ambient Temperature</b>	-40 °C to +65 °C (-40 °F to +149 °F)								
<b>CCT/CRI</b>	5000K, 4000K, 3000K/70 CRI								
<b>Fixture Weight</b>	10.1 lb. (without hood)								
<b>Warranty</b>	60,000+ hours; 5 years								

<sup>Ⓞ</sup> Ceiling and pendant cone hood mounted luminaires are not designed to use the PCD2 photocontrol. Ceiling mounts must use an FS/FD box with a photocontrol. Contact your local sales representative for more information.

<sup>Ⓞ</sup> For specific lumen output information, see Lamp Comparison Chart in Mercmaster™ Low Profile LED catalog pages.

<sup>Ⓞ</sup> Guards for the glass refractors and globes are ordered separately. See Mercmaster™ Low Profile LED Catalog pages. J5 glass refractor is available for cCSAus rating only.

<sup>Ⓞ</sup> Factory installed. Fusing available for cCSAus rating only.

<sup>Ⓞ</sup> Luminaires with photocontrol are not rated IP66, Marine Outside Type (Salt Water), or Class II. Photocontrol available for 120-277 VAC only.

<sup>Ⓞ</sup> 120V-277 VAC versions only. For 347-480 VAC version, please see Mercmaster™ LED Low Profile catalog pages. Photocontrols available for cCSAus rating only.

<sup>Ⓞ</sup> IDA Dark Sky Approved when ordering [I]MLLED[A/B/C/D/R/W]xxW[P/D/G]J5Bxxx with MMVISOR accessory